AO 91 (Rev. 11/11) Criminal Complaint

### Sealed

Public and unofficial staff access to this instrument are prohibited by court order

## UNITED STATES DISTRICT COURT

for the

Southern District of Texas

United States Courts Southern District of Texas FILED

August 20, 2020

Sam S. Sheldon, U.S. Magistrate Judge

Printed name and title

			Southern	District of	10/10/5			
United States of America v. Zhengdong Cheng			) ) ) ) )	Case No.	4:20mj		lley, Clerk of Cour	
		Defendant(s)						
			CRIMINA	AL CON	APLAIN'	Т		
	I, the cor	nplainant in thi	s case, state that the fol	lowing is	true to the be	est of my knov	vledge and belie	f.
On or a	bout the d	late(s) of	April 2013 until prese	nt	in the count	y of	Brazos	in the
So	uthern	District of _	Texas	, the defe	ndant(s) vio	lated:		
Code Section				Offense Description				
	.C. 1343 .C. 1001 .C. 371		Wire Fraud False Stateme Conspiracy	nt				
See att	This crin	-	is based on these facts	:				
☑ Continued on the attached sheet.					B	enjamin Harpe	ant's signature er, FBI Special A	Agent
C	( - 1 - C	4-11	11 -			Printed i	name ana title	
Sworn to before me telephonically.								
Date:	August	20, 2020	-			Judge	's signature	1

Houston, Texas

City and state:

# AFFIDAVIT IN SUPPORT OF CRIMINAL COMPLAINT AND ARREST WARRANT

I, Benjamin Harper, Special Agent with the Federal Bureau of Investigation being first duly sworn, hereby depose and state as follows:

#### INTRODUCTION AND AGENT BACKGROUND

- I make this affidavit in support of an application and affidavit for Criminal Complaint.
- 2. I am a Special Agent with the Federal Bureau of Investigation ("FBI"), and have been so employed since March 2019. I am currently assigned to the Houston Division, Bryan Resident Agency. I am charged with the duty of investigating violations of the laws of the United States, collecting evidence in cases in which the United States is or may be a party in interest, and performing other duties imposed by law. As a Special Agent of the FBI I have received training, participated in, and investigated, violations of federal law, including fraud. I have gained experience in conducting these investigations through training, seminars, and day-to-day work related to investigations of this type.
- 3. The facts in this affidavit come from my personal observations, my training and experience, and information obtained from other agents and witnesses. This affidavit is intended to show merely that there is sufficient probable cause for the requested warrant and does not set forth all of my knowledge about this matter.
- 4. As set forth below, there is probable cause to believe that Zhengdong Cheng ("Cheng") engaged in a scheme with individuals both known and unknown to the Government to defraud the National Aeronautics and Space Administration ("NASA"). It was an object and result of Cheng's scheme to personally enrich Cheng by approximately \$86,876 (as of October

2019) in NASA grant funds, gain access to the unique resources of the International Space Station (ISS), leverage NASA grant resources to further the research of Chinese institutions, and enhance his ability to become a Thousand Talents Plan ("TTP") award recipient from the Government of China by knowingly and intentionally making false statements through email communications, official University documents, and in U.S. Government grant documents to hide Cheng's affiliations with the Chinese government and private entities, thereby inducing Texas A&M University ("TAMU") to submit false statements to NASA.

#### **SUBJECT OFFFENSES AND ACTS**

- 5. Title 18, United States Code, Section 1001 provides that "whoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowing and willfully (1) falsifies, conceals, or covers up by and trick, scheme, or device a material fact; (2) makes any materially false, fictitious, or fraudulent statement or representation; or (3) makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry; shall be fined under this title, imprisoned not more than five years…"
- 6. Title 18, United States Code, Section 1343 provides that "[w]hoever, having devised or intending to devise any scheme or artifice to defraud, or for obtaining money or property by means of false or fraudulent pretenses, representations, or promises, transmits or causes to be transmitted by means of wire, radio, or television communication in interstate of foreign commerce, any writings, signs, signals, pictures, or sounds for the purpose of executing such scheme or artifice, shall be fined under this title or imprisoned not more than 20 years, or both."

- 7. Title 18, United States Code, Section 371 provides that "[i]f two or more persons conspire either to commit any offense against the United States, or to defraud the United States, or any agency thereof in any manner for any purpose, and one or more such persons do any act to effect the object of the conspiracy, each shall be fined under this title or imprisoned not more than five years, or both."
- 8. In 2011, Congress passed The Department of Defense and Full-Year Appropriations Act, Public Law 112-10 and the Consolidated and Further Continuing Appropriations Act of 2012, Public Law 112-55. Under these Acts, NASA was prohibited from using appropriated funding to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally in any way with China or any Chinese-owned company ("NASA's China Funding Restriction").

#### PROBABLE CAUSE

#### Overview

- 9. Cheng was a Full Professor employed by TAMU, located in the Southern District of Texas. TAMU hired Cheng in May 2004. As a faculty member at TAMU, Cheng owed a duty of loyalty and candor to TAMU at all times. Cheng performed research under grants funded by United States Government agencies including NASA.
- 10. Beginning at least as early as 2012 and continuing through at least 2018, Cheng was also the Director of the Soft Matter Institute of Guangdong University of Technology ("GDUT") in Guangdong, China. Cheng was employed as a Guangdong Province Chair Professor, GUDT; term of employment was September 1, 2011, to August 31, 2014. Cheng was further employed as a "special hire" at GDUT from on or about September 1, 2011, to present. GDUT was established by the People's Republic of China (PRC)'s Ministry of Education in or

about 1995. The PRC's Ministry of Education continued to manage GDUT at all times relevant to the conduct described herein.

- 11. Additionally, Cheng participated in the PRC's Hundred Talents Plan and the River Talent Plan (PRTP), and applied to participate in the TTP (collectively, the Chinese Talent Plans). The Chinese Talent Plans are programs established by the Chinese government to recruit individuals with access to or knowledge of foreign technology or intellectual property. Through these plans the Chinese government has created a significant financial incentive for foreign, talented individuals to transfer international technology and intellectual property to China, licitly or otherwise.
- 12. In 2014, Cheng jointly formed Foshan City Ge Wei Technology Company, Ltd, an innovation-oriented enterprise affiliated with GDUT and located at the Numerical Control Equipment Cooperative Innovation Institute of GDUT in Nan Hai District, Foshan City, China. Cheng and the founding members owned 90% of the company's shares, and the company was dedicated to the design, preparation, and application of microfluidic chips. As of January 2019, Cheng was still an owner and had held various positions such as Academic Lead and Technical Advisor to Foshan City Ge Wei Technology Co.
- 13. From in or about December 1, 2017, to August 31, 2018, Cheng was also a paid Visiting Professor at the Academy for Advanced Interdisciplinary Studies at Southern University of Science and Technology ("SUSTech") in Nanshan District, Shenzhen, Guangdong, China, and a Thousand Talent applicant at China University of Science and Technology in Hefei, Anhui Providence, China. In or about November 2017, Cheng signed an offer letter with SUSTech. The appointment was effective from on or about December 1, 2017, to August 31, 2018, and required Cheng to teach one senior undergraduate or graduate course and to assume other

teaching, tutor, and service duties required by SUSTech. The offer letter was also signed by Dr. Shiyi Chen, President of SUSTech. Cheng's offer letter stated that Cheng's monthly pre-tax salary was 50,000 RMB with pre-tax 10,000 RMB housing allowance and 3,000 RMB traveling allowance per month. The offer letter further stated that Cheng would receive a research fund of 100,000 RMB towards his research operation every three months. The offer letter was also signed by Dr. Shiyi Chen, President of SUSTech. Travel records reflect that Cheng spent approximately 133 days outside of the United States during the December 1, 2017 to August 31, 2018.

- 14. Cheng was part of a research team that applied for, and ultimately received, a \$746,967 grant to conduct research for NASA. NASA regulations for the grant Cheng's team applied for prohibited recipients from, "participating, collaborating, or coordinating bilaterally with China, any Chinese-owned company, or any Chinese university, at the prime recipient level or at any sub-recipient level, whether the bilateral involvement was funded or performed under a no-exchange of funds arrangement."
- 15. Your affiant believes that Cheng hid his association with China, Chinese-owned companies, and Chinese universities, which, according to NASA officials, if known to NASA, would have prohibited him from participating in the NASA grant and receiving U.S. Government funding through that grant. Cheng did so by submitting false or misleading affirmations to TAMU in the preparation of the grant application and through multiple affirmations thereafter. Specifically, during the application process, and then later throughout the performance of the NASA grant, Cheng concealed that he was: 1) the Director of the Soft Matter Institute of GDUT, from in or about 2012 through at least 2018; 2) employed as a "special hire" at GDUT from on or about September 1, 2011, to present; 3) jointly formed

Foshan City Ge Wei Technology Company, Ltd. (China) in or about 2014; 4) a paid Visiting Professor at the Academy for Advanced Interdisciplinary Studies at Southern University of Science and Technology (China) from in or about December 2017 to in or about August 2018; 5) a Hundred Talents Plan member at GDUT; and 6) a TTP applicant at China University of Science and Technology in or about June 2018.

16. It was an object and result of Cheng's scheme to personally enrich Cheng by approximately \$86,876 (as of October 2019) in NASA grant funds, gain access to the unique resources of the International Space Station (ISS), leverage NASA grant resources to further the research of Chinese institutions, and enhance his ability to become a TTP award recipient from the Government of China.

#### Relevant Grant Restrictions

- 17. Cheng's research team at TAMU applied for NASA Grant NNX13AQ60G (the Grant) in or about April 2013. The Grant was subject to 14 C.F.R. 1260, Restrictions on Funding Activities with China. 14 C.F.R. 1260 provided:
  - a. Pursuant to The Department of Defense and Full-Year Appropriation Act, Public Law 112-55, Section 539; and future-year appropriations (hereinafter, "the Acts"), NASA is restricted from using funds appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any sub recipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.
  - b. "China or Chinese-owned Company" means the People's Republic of
     China, any company owned by the People's Republic of China, or any company

incorporated under the law of the People's Republic of China. According to guidance published by NASA and circulated to grant applicants, "Chinese universities and other similar institutions are considered to be incorporated under the laws of the PRC and, therefore, the funding restrictions apply to grants and cooperative agreements that include bilateral participation, collaboration, or coordination with Chinese universities."

- c. The restriction in Acts do not apply to commercial item of supply needed to perform a grant or cooperative agreement.
- d. Sub award- The recipient shall include the substance of this provision in all subawards made hereunder. The NASA restrictions, according to NASA guidance, do "not restrict individual involvement based on citizenship or nationality. Rather, individuals are subject to the restriction if they are affiliated with institutions of the People's Republic of China or Chinese-owned companies incorporated under the laws of China. Thus, a team member who is a Chinese citizen may work on a NASA project, but an individual affiliated with an institution of the Chinese would be subject to the statutory restriction."

#### NASA Grant Application and Administration

18. During TAMU's application process for the Grant and thereafter, Cheng served as the Principal Investigator (PI) for the Texas A&M Engineering Experiment Station (TEES). Cheng was described as the PI in TAMU's application for the Grant, "Title: Research Opportunities in Complex Fluids and Macromolecular Biophysics, Liquid Crystals of Nanoplates." TAMU was ultimately awarded the Grant for \$746,967. The period of performance was initially from September 1, 2013, to August 31, 2018, but was subsequently extended to August 2020.

19. The solicitation for the Grant was contained in NASA Research Announcement(NRA) NNH13ZTT001N. The NRA stated in part:

[T]his NRA solicits Complex Fluids research proposals from Principal Investigators from U.S. institutions to participate in the Advanced Colloids Experiment (ACE) test series. The ACE will observe the behavior of colloidal systems using a microscope in the microgravity environment of the ISS. By performing soft-condensed matter experiments in a microgravity environment, scientists have been able to remove the masking effects of sedimentation, convection, and particle jamming in a timescale not available on Earth.

- 20. In April 2013, TAMU submitted its grant proposal to NASA. TAMU's proposal for the Grant omitted any involvement with individuals/entities in China and clearly stated that the PI, the Co-Investigator, Equipment, and Facilities did not involve activities outside the U.S. or partnerships with international collaborators, other than collaborators from Madrid, Spain, who were to do theoretical modeling work. In the section titled, "International Collaboration," which prompted the Principal Investigator, *i.e.* Cheng, to disclose whether there would be international collaboration in the grant, the proposal stated: "No." TAMU's proposal for the grant included a resume for Cheng that did not indicate any employment or affiliation with China, any Chinese-owned company, or Chinese University. TAMU officials informed me that Cheng approved the above application approximately six days before it was submitted to NASA.
- 21. In August 2013, a NASA Shared Services Center (NSSC) Procurement

  Department employee emailed a TAMU Proposal Administrator a detailed description of

  NASA's restrictions on funding activities with China and requested the completion of a form

  titled "Assurance of Compliance China Funding Restriction." The NSSC employee informed

  TAMU that "[r]eceipt of this form is required by the Grant Officer before signing the award."

  The Assurance of Compliance stated in part:

NASA is restricted from using funds appropriated in the Acts to enter into or fund any grant or cooperative agreement of any kind to participate, collaborate, or

coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level and at all subrecipient levels, whether the bilateral involvement is funded or performed under a no-exchange of funds agreement. (2) Definition: "China or Chinese-owned Company" means the People's Republic of China, any company owned by the People's Republic of China, or any company incorporated under the laws of the People's Republic of China...By submission of its proposal, the proposer represents that the proposer is not China or Chinese-owned company, and that the proposer will not participate, collaborate, or coordinate bilaterally with China or any Chinese-owned company, at the prime recipient level or at any sub recipient level, whether the bilateral involvement is funded or performed under a no-exchange of funds arrangement.

- 22. On August 29, 2013, the TAMU Proposal Administrator replied to the NSSC employee, and carbon copied Cheng on the response. The email chain contained the above information and stated, "[NSSC employee], per your request please find the signed forms attached for Dr. Zhengdong Cheng Assurance of Compliance China Funding Restrictions…" The Assurance of Compliance was signed by TAMU's Director of Contracts and Grants and dated August 29, 2013.
- 23. Email correspondence from August 29, 2013, makes clear that Cheng was aware of restrictions on the involvement of China and Chinese institutions in the research conducted pursuant to the Grant. That day, Cheng emailed the NSSC employee, with others carbon copied, and said that "[s]ince NASA is watching the CHINA involvement, I would like to disclose to NASA that I am hiring new graduate students this fall or in the coming spring for the project, they might turn out to be Chinese students. I want to make sure that this would be ok. Please advise." No response by NASA was found in the reviewed materials. Notably, Cheng did not at this time state that he was employed by or in any other way affiliated with China, any Chinese-owned company, or any Chinese university.
- 24. On September 19, 2013, NASA awarded the Grant to TAMU. The Grant included a statement that "Restrictions on Funding Activities with China for Awards Subject to

14 CFR 1260," and provided the contents of the restriction in its entirety. The Grant further incorporated the NASA Grant Solicitation, TAMU's proposal, and TAMU's signed assurance of compliance.

- 25. Eleven days later, on September 30, 2013, Cheng certified and submitted an annual "Financial Disclosure Statement" to TAMU. The statement did not list any Chinese consulting, external employment, or research activities.
- 26. In or about July 2015, as part of the administration of the Grant, Cheng explicitly affirmed to TEES Compliance Officers that "I have read the language related to NASA's Restrictions on Funding Activities with China, and I will not share any of the research equipment, technology, or software with China or anyone affiliated with any Chinese-owned company or institution (this includes any visiting scholars from Universities in China) without first obtaining an export control license from the U.S. Department of State or the U.S. Department of Commerce." NASA's Restrictions on Funding Activities with China included the above language regarding Chinese universities.

Cheng Did Not Disclose His Employment or Association with China, Chinese-owned Companies, or Chinese Universities During the Preparation, Submission, and Performance of the Grant

27. Multiple publications authored by Cheng revealed that from at least 2012 to 2018, in no less than thirteen published research papers, Cheng's affiliation was listed as Guangdong Provincial Key Laboratory on Functional Soft Condensed Matter, School of Materials and Energy, Guangdong University of Technology, Guangzhou 510006, China. Some publications further identify Cheng as a faculty member of GDUT. Eight of the articles listed Cheng's affiliation as both GDUT and TAMU. Fourteen of Cheng's publications acknowledged financial

support from the National Science Foundation of China (NSFC), and two of those publications listed financial support from both the NSFC and the Grant.

- 28. Cheng obtained at least two Chinese patents as a direct result of his work for GDUT and Foshan City Ge Wei Technology Co., Ltd. These patents were filed in 2016, and 2017 (during the performance of Cheng's NASA grant). Cheng's patent documents that investigators discovered were in Mandarin, and had to be translated.
  - a. Cheng was an inventor on a GDUT patent application filed in China. Patent application CN105854967A was filed by GDUT on June 15, 2016. The application was for a microfluidic chip device and microfluidic channel structure, and Cheng was listed as one of the inventors. On July 18, 2017, the rights of the patent application were transferred to include both GDUT and Foshan City Ge Wei Technology Co., Ltd. Cheng was on the board of directors of Foshan City Ge Wei Technology Co., Ltd and a shareholder. In a 2015 PowerPoint presentation titled, "Foshan City Ge Wei Technology Co., Ltd. Design, Fabrication and Application of High-End Microfluiditic Chips" the pre-patent research is outlined. Under a slide subtitled "Science research projects led during the last five years," the NASA grant is specifically listed number 1 ("Liquid Crystals of Nanoplates. NASA (NASA). \$747,000. Sept. 1, 2013 through Aug. 31, 2018").
  - b. Cheng was identified as one of the inventors on Chinese Patent number CN106944155A published on July 14, 2017 entitled, "A kind of method of photochemical catalyst and photocatalytically degradating organic dye," filed by GDUT and the Foshan Chrome Technology Co., Ltd.

- c. When asked by the FBI, TAMU officials reported that they were unaware
   Cheng had any Chinese patents.
- 29. In Cheng's TTP application, dated June 20, 2018, which was obtained as part of this investigation, Cheng wrote: "Professor Cheng established the Soft Matter Research Center at Guangdong University of Technology in 2012 which became the Key Lab of Functional Soft Condensed State Matter of Guangzhou Providence (Professor Cheng is the Lab Director)." Cheng's statement is corroborated by a 2012 GDUT publication on its online portal. According to a machine translation of the publication, "Cheng Zhengdong, Professor of Distinguished Professor of the University, Professor of 'Pearl River Scholar,' and Director of the Center for Soft Matter Research of Guangdong University of Technology . . . is currently an associate professor at Texas A&M University." In a similar publication, GDUT's website described Cheng as "Professor of the 'Hundred Talents Program' of our school, a doctoral tutor, and director of the Soft Substance Research Center."
- 30. During the preparation and submission of the Grant, Cheng was a Chair Professor employed by Guangdong University of Technology. Investigators obtained a copy of Cheng's employment contract titled "ZHUJIANG (PEARL RIVER) SCHOLAR OF HIGHER EDUCATION INSTITUTIONS, GUANGDONG PROVINCE CHAIR PROFESSOR EMPLOYMENT CONTRACT," dated August 2011. The Hiring Party was "Guangdong University of Technology (referred to as Party A)" and the Hired Party was "Cheng, Zhengdong (referred to as Party B)." This employment contract stated Cheng's term of employment "starts from September 1, 2011 through August 31, 2014 during which period Party B is committed to work on his position at Party A for three (3) months each year. Under "Article II" of this employment contract, Party B's Work Objectives and Tasks included 'File application for more

than 1 state-level project and more that 2 province-level projects by listing Party A as the first participating institution and securing funding in the amount of RMB 1.5 million yuan for Party A's science research efforts." Cheng's work objectives and tasks also included, "Organize and establish the soft matter research center of Guangdong University of Technology, assemble the research team for "Soft Matter" advanced front research, enhance the capability of engagement in the state's major or key projects, and produce a whole array of high-level academic research accomplishments." Cheng was also to "Assist to recruit "top notch" overseas outstanding talents needed by Party A for its developmental efforts of academic discipline of material science." For Cheng's work, Cheng was to receive ten thousand yuan a month, "based on actual working months." Cheng was also to receive one roundtrip international flight ticket between "Guangzhou and U.S. each year."

31. During the preparation and submission of the Grant, and thereafter, from on or about September 1, 2011 to Present, Cheng was further employed by Guangdong University of Technology as a "Special Hire Professor under Hundred Talents Program." Investigators obtained a copy of Cheng's "General accounting of Salaries/Wages for Special-Hire Professor under Hundred Talents Program." Cheng's "Position" was listed as "No-Full Time Special Hire Professor of School of Materials and Energy." This Salaries/Wages spreadsheet spanned from approximately September 2011 to August 2016, and listed Cheng's claimed number of work days for this period as 330. The spreadsheet further reflected that Cheng had been paid 412,748.00 yuan, and was due another 37,252 yuan. Investigators obtained Cheng's signed employment contract for "Position of Special Hire" GDUT dated September 1, 2016. Term of Contract was from "09/01/2016 to 08/31/2021." This contract stated that Cheng will work at GDUT School of Materials and Energy, for three months a year. Cheng's monthly salary was to

be Fifty Thousand Yuan. In Cheng's contract under "Objectives and job tasks during the term of employment," one of the items listed that Cheng was to "Take up the management work of the Guangdong province key lab; maintain the international exchange of the laboratory and assure the international conference related to soft substance to take place on regular schedule with continuously increasing influences."

Cheng Made Additional Affirmations During the Course of the Grant

- 32. During the course of his work on the Grant, Cheng made various affirmations in which he did not disclose any connection to China, Chinese-owned companies, or Chinese universities.
- 33. Cheng was required to report and request permission for faculty consulting and external professional employment positions. Cheng was also required to report all research or research activities in which he is engaged in on a Financial Disclosure Statement each year.

  TAMU reported that, from 2012 to 2018, Cheng did not report any Chinese consulting, external employment, or external research activities. Specifically, Cheng submitted certifications on August 24, 2012, September 5, 2012, September 30, 2013, October 1, 2014, October 8, 2015, October 10, 2016, October 16, 2017, October 16, 2018, and October 7, 2019. None of the affirmations made mention of Cheng's work for GDUT or any external Chinese entity. TAMU reported that had Cheng reported these activities, TEES would have reached out to the NASA Contracting Office about grant compliance issues. NASA confirmed that had they known about Cheng's affiliations, they would not have awarded the Grant to TAMU with Cheng as the PI.
- 34. In 2016, Cheng submitted a curriculum vitae ("CV") in connection with his application for a Full Professor position with TAMU. Along with his CV, on or about March 26, 2016, Cheng submitted a signed declaration titled, "Statement Regarding Curriculum Vitae."

The declaration stated, "I, Zhengdong Cheng, declare that the enclosed curriculum vitae is correct and current as of the date on my signature below[.]" Cheng's CV contained headings for, "Research Interests," "Appointments," "Honors and Awards," "Synergistic Activities," "Industrial collaboration," "International collaboration," "Outreach activities," "Teaching," "University and community service," "Multidisciplinary Strategic Areas at the University Level," "Internationalization," and "Professional Outreach." Nowhere in the CV did Cheng disclose either of his true affiliations with GDUT or Foshan City Ge Wei Technology Co., Ltd.

35. On or about June 22, 2020, Cheng completed his TAMU College of Engineering Annual Disclosure Questionnaire. Cheng answered 'no" to the following questions:

Do you conduct any external consulting or other employment (including contract work) outside of your assigned position with Texas A&M University College of Engineering (TAMUCOE) or Texas A&M Engineering Experiment Station (TEES) for any foreign or domestic entity? **Answer: NO** 

With regard to any publicly traded entity, in the past 12 months, have you received remuneration (salary, consulting fees, honoraria, paid authorship) and/or held any equity interest (stock, stock option, or other ownership interest) that exceeds \$5,000, when aggregated? (This would not include income from investment vehicles, such as mutual funds and retirement accounts, as long as you do not directly control the investment decisions made in these vehicles) **Answer: NO** 

With regard to any non-publicly traded entity, in the past 12 months, have you received remuneration (salary, consulting fees, honoraria, paid authorship) that exceeds \$5,000 or do you hold any equity interest (e.g. stock, stock option, or other ownership interest)? **Answer: NO** 

In the past 12 months, have you held a board or fiduciary/trustee position with a foreign or domestic organization? **Answer: NO** 

Apart from any disclosures of external consulting or other outside employment in the three previous questions, do you maintain a position/role/distinction at another foreign or domestic entity? (ex. Adjunct, Visiting, Guest, Honoraria, Chair, etc.)

Answer: NO

Do you have access to graduate students, lab space, materials, etc. at a foreign or domestic entity other than TAMUCOE/TEES/TAMUQ? **Answer: NO** 

Do you receive any paid travel or travel reimbursement from a foreign or domestic source? **Answer: NO** 

Do you conduct any research under any external (Non-TAMUCOE or Non-TEES) awards or subawards that is not managed by TAMUCOE/TEES? **Answer: NO** 

Do you list any affiliation (other than TAMUCOE, TEES or other TAMUS members) on your publications? **Answer: NO** 

Do you participate in any foreign talent recruitment programs? Answer: NO

Do you have any collaborations with foreign entities, institutes, university labs or private entities in terms of joint projects, research, proposal reviews or other educational activities outside of TAMUCOE/TEES approved agreements?

Answer: NO

In the past 12 months, have you engaged in evaluating proposals for foreign and other committees related to research and research policy or education? **Answer: NO** 

With regard to System Policy 33.04, related to Use of System Resources, please confirm that you DO NOT engage in any practices that may be deemed as an improper use of system resources (equipment, vehicles, procurement cards, funds, etc.) which could lead to increased costs and risks to the system, particularly from operational, regulatory, and reputational standpoints? **Answer: I confirm** 

Future External Employment System regulation 31.05.01 and 31.05.02 require disclosure of all external employment. If a new relationship is proposed that was not previously disclosed, you can comply with this regulation by submitting the following form at any time: Faculty: https://it-lf-ecmf2.ads.tamu.edu/Forms/ENGR-Faculty-Consulting-; Request Staff: https://it-lf-ecmf2.ads.tamu.edu/Forms/ENGR-Staff-External-Employment. **Answer: If I** 

intend to undertake external employment, I will submit a form for approval

Other Indicia That Cheng Was Aware of NASA Restrictions

36. During the course of the Grant, Cheng was provided with additional information about NASA restrictions on the Grant pertaining to China and Chinese institutions. For example, in April 2015, Cheng exchanged e-mails with a TAMU compliance officer about a visiting scholar from China. In the email chain, Cheng was told that the visiting scholar could not

work on the Grant. Cheng forwarded the email chain to the visiting scholar and stated: "[t]here is some delay in the process of your paper work. The main reason is that the original proposal for your research is on Liquid crystals, which I have a project is sponsored by NASA, which specifically restrict collaboration with China."

37. Similarly, in or about July 2015, a TAMU Compliance officer e-mailed Cheng a link to Frequently Asked Questions (FAQs) published by NASA to help their internal and external research community better understand the restrictions. In response, Cheng certified that no one affiliated with Chinese-owned businesses would work on the Grant, stating:

I have read the language related to NASA's Restrictions on Funding Activities with China, and I will not share any of the research equipment, technology, or software with China or anyone affiliated with any Chinese-owned company or institution (this includes any visiting scholars from Universities in China) without first obtaining an export control license from the U.S. Department of State or the U.S. Department of Commerce.

38. TAMU officials also brought the NASA restrictions to Cheng's attention in 2017. In or about September 2017, an NSSC employee e-mailed TAMU and stated that "It has been brought to my attention that PI Zhengdong Cheng has been on a sabbatical to China for three month[s]. Per 1800.905(a) the absence of the PI for three month requires approval. Can you please advise me of the status of the PI? Can you also please advise if the PI has ties to China?" A TAMU employee e-mailed Cheng, reminding him that he needed to obtain TAMU's permission to leave for such an extended period of time. In or about November 2017, Cheng sent a TAMU employee the following proposed language to send to NASA:

While Dr. Cheng was in China, he continued to contribute to the project and worked with his graduate student [omitted] (also NASA management Padetha and Hunt) and others in the research group. Dr. Cheng is currently stateside and will be returning to China soon for the planned travel and meetings, but will continue to work on the project while in China. Dr. Cheng does have family in China. The sabbatical to China was approved by the University through the Dean of Faculty Office. While on sabbatical, Dr. Cheng spent time in the United States to work and attend meetings (such as the ASGSR and ACHIE meetings) on research projects.

- 39. Later in November 2017, a TAMU compliance officer recommended that Cheng not work on the Grant while in China. In doing so, the TAMU compliance officer e-mailed Cheng that "[i]n the NASA agreement they included a clause regarding Chinese owned companies and institutions" and attached the certification from the project that includes the language. Cheng was also informed that since he was on sabbatical, another professor would have to be assigned to host visiting scholars in his absence. Cheng was informed that his substitute would have to take Export Control training.
- 40. Similarly, in December 2017, a NASA employee e-mailed NASA's policies on Foreign Citizens and Technology Transfer to Cheng, among others. The email contained the specific language on NASA's Restrictions on Funding Activities with China.

Cheng Knowingly Violated NASA Regulations by Maintaining Associations with Prohibited
Chinese Entities

- 41. Cheng maintained several undisclosed associations with Chinese institutions in violation of NASA restrictions. As stated previously, Cheng's TTP application identified Cheng as: 1) the Director of the Soft Matter Institute of GDUT from in or about 2012 through at least 2018; 2) partial owner of Foshan City Ge Wei Technology Company, Ltd. (China) from in or about 2014 to at least 2019; 3) a paid Visiting Professor at the Academy for Advanced Interdisciplinary Studies at Southern University of Science and Technology (China) from in or about December 2018 to in or about August 2018.
- 42. Cheng further maintained a relationship with a Chinese government entity. On August 12, 2015, Cheng emailed a GDUT Professor (hereafter "GDUT Professor 1") a PowerPoint document. An FBI translation of the PowerPoint document revealed that the document was titled, "Design, Fabrication and Application of High-End Microfluidic Chips,"

and concerned a project involving GDUT and Foshan City Ge Wei Technology Co., Ltd. Cheng was listed as an owner of Foshan City Ge Wei Technology, as well as the person in charge of the project. GRC Grant No. NNX13AQ60G was specifically referenced in the presentation. The PowerPoint stated in part, "The principal of Project Professor Cheng, Zhengdong is committed to work no less than 6 months cumulatively at Foshan Ge Wei Technology Co., Ltd. Each year, and his work at the original employer shall not affect the requirements of the work schedule in Foshan. All member of this team are committed to work full time at Foshan Ge Wei Technology Co., Ltd., associated with Guangdong University of Technology and will sign a 3-year or longer-term contract with City's Bureau of Science and Technology to work in Foshan [Emphasis added]. They will be engaged in microfluidics chip research and application project, and use the government funds in accordance with the provision in the contract."

A3. TAMU officials also recovered an offer letter signed by Cheng in or about November 2017 for a paid Visiting Professor position in the Academy for Advanced Interdisciplinary Studies, SUSTech. The appointment was effective from December 1, 2017, to August 31, 2018 and required Cheng to teach one senior undergraduate or graduate course, and assume the Tutor duty and other teaching and service duties required by SUSTech. This offer letter was also signed by Dr. Shiyi Chen, President of Southern University of Science and Technology.

Along with His Co-conspirators, Cheng Knowingly Violated NASA Regulations by Participating, Collaborating, or Coordinating Bilaterally with China and Chinese-owned Companies and Entities

44. Cheng conspired with individuals both known and unknown to the Government to conceal his affiliations and collaborations with Chinese institutions and companies during the performance of the Grant. It was an object and result of the scheme to circumvent NASA's

restrictions and receive U.S. Government funding. As part of the scheme, Cheng maintained his role as a Professor and Director of the Center for the Soft Matter Research of GDUT.

- 45. Cheng, along with co-conspirators (hereafter referred to as "TAMU Researcher 1", "TAMU Researcher 2," and "TAMU Researcher 3"), knowingly violated NASA regulations by participating, collaborating, or coordinating with Chinese-owned companies and institution. According to an e-mail from TAMU Researcher 1 to Cheng, as of 2014, Cheng's U.S.-based research team at TAMU had "hardly did any" research for the Grant. In order to fulfil the research and deliverable requirements of the Grant and to continue to receive NASA funds, Cheng turned to research performed at GDUT by Cheng's China-based researcher (hereafter "GDUT Researcher 1"), and then passed on the results to NASA, according to multiple e-mails involving Cheng.
- 46. For instance, on or about April 14, 2014, Cheng forwarded an e-mail from GDUT Researcher 1 to TAMU Researcher 2. The e-mail from GDUT Researcher 1 contained research results (RESULTS 1). GDUT Researcher 1 was then added to a series of e-mails among Cheng and his TAMU research students (including TAMU Researchers 1&2) discussing RESULTS 1. Cheng later actively hid GDUT Researcher 1's involvement with the experiments which yielded RESULTS 1. In May 2014, TAMU Researcher 2 asked Cheng who should be listed as authors, Cheng e-mailed that "GDUT Research 1 is hard to be right now because of the nasa [sic] prohibition." TAMU Researcher 2 responded "Yes, That is what I am considering. They don't want too many Chinese ©" to which Cheng replied: "No Chinese organizational collaboration."
- 47. On June 21, 2014, Cheng forwarded an email from the American Physics Society to GDUT Researcher 1, GDUT Professor 1, and TAMU Researcher 2. The American Physics Society email related to the submission of a scientific manuscript concerning RESULTS 1. The

authors listed for the manuscript included GDUT Researcher 1, GDUT Professor 1, and Cheng. The report contained RESULTS 1.

- 48. On July 26, 2014, Cheng emailed a NASA employee a deliverable, *i.e.*, results required to continue to receive the Grant. The deliverable was titled, "Year 2013-2014 report Liquid Crystals of Nanoplates" and contained RESULTS 1.
- 49. Similarly, a paper published in June 2015 reveals Cheng continued to collaborate with GDUT Researcher 1 on research related to the Grant. On June 15, 2015, *Soft Matter* published a research paper titled, "Observation of isotropic-isotropic demixing in colloidal platelet-sphere mixtures." Under "[a]cknowledgements," the paper stated, "[t]his work is partially supported by NSF (DMR-1006870) and NASA (NASA-NNX13AQ60G). The authors and their affiliations were: two GDUT employees, GDUT Researcher 1, two TAMU researchers (including TAMU Research 2), and Cheng.
- 50. In June of 2015 Cheng emailed GDUT Professor 1 a draft PowerPoint presentation. This presentation's title slide included: 1<sup>st</sup> Year Research Results & Future Directions of the Lab; Zhengdong Cheng; May 16, 2015; Guangdong Provincial Key Laboratory of Functional Soft Condensed Matter, (GPKL FSCM); School of Materials Science & Energy, Guangdong University of Technology; Soft Matter International Laboratory Enterprise; (SMILE).
- 51. The presentation listed the "Mission of the Laboratory" as "This Guangdong Provincial Key Laboratory is a international enterprise on soft matter, serving the students and faculty of GDUT, and collaborating with the industry and society of southern China."
- 52. The presentation had researcher assignments for specific laboratory technologies. Under the technology "Liquid Crystals" subset "ZrP", were TAMU Researcher 1,

TAMU Researcher 3, and GDUT Researcher 1. Under "Liquid Crystals" subset "Nanoplate Surfactants," four TAMU researchers were listed including TAMU Researchers 2 & 3. Under "Liquid Crystals" subset "Hydrogels," TAMU Researcher 2 was listed. Under "Energy Materials" subset "Carbon Materials," TAMU Researcher 3 was listed. Under "Energy Materials" subset "Nano fluids," TAMU Researcher 2 was listed. In total, this presentation reflected that approximately eight TAMU researchers were working on research technologies for GPKL FSCM. Cheng, along with five of listed TAMU researchers (including TAMU Researchers 1&3) were specifically being paid NASA Grant moneys during the periods they are listed as performing research for the "GPKL FSCM" laboratory (2014/2015).

53. In November 2017, in response to NASA's review of whether the Grant restrictions had been complied with, Cheng exchanged e-mails with a number of individuals to include TAMU Researchers 1 & 3 about bringing "possible mistakes" to NASA's attention.

Among the "possible mistakes" mentioned was Cheng's acknowledgement of the Grant in three research publications. During the exchange of emails, a co-conspirator proposed the false narrative that, "the research work in the published papers by Chinese university has nothing related to NASA project." TAMU Researcher 1 agreed, and later sent an email to NASA management containing a similar false assertion.

TAMU's requests for payment and certifications to NASA

54. From on or about February 18, 2014 to December 6, 2019, TAMU submitted eighty-three invoices by wire from College Station, Texas, to NASA in Mississippi via the U.S. Department of Health and Human Services, Payment Management System (HHS PMS), requesting and receiving \$662,045.28 in payments from NASA in accordance with the Grant.

55. TAMU further submitted quarterly Federal Financial Reports ("FFRs") to NASA for the Grant. The FFRs reported the Grant funds TAMU received from NASA during the reporting period. Over the life of the Grant, there were 31 FFRs submitted to NASA. All of the FFRs were signed by a TAMU employee and contained the following certification:

By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and intent set forth in the award documents. I am aware that any false, fictitious, or fraudulent information may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 18, Section 1001).

#### **CONCLUSION**

56. Based on the foregoing, I believe there is probable cause to issue a criminal complaint and arrest warrant charging ZHENGDONG CHENG with violations of Title 18, United States Code, Sections 371 (Conspiracy), 1001 (False Statements), and 1343 (Wire Fraud).

I declare under the penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Respectfully submitted,

Benjamin Harper Special Agent

Federal Bureau of Investigation

Telephonically subscribed and sworn to before me on August 20, 2020 and I find probable cause.

SAM S. SHELDON

UNITED STATES MAGISTRATE JUDGE SOUTHERN DISTRICT OF TEXAS